

Research Journal of Information Technology 4(2): 27-37, 2012

ISSN: 2041-3114

© Maxwell Scientific Organization, 2012

Submitted: June 13, 2011

Accepted: August 08, 2011

Published: June 30, 2012

Strategic Use of Database Marketing for Marketing Decision-Making

¹N. Gladson Nwokah and ²Juliet Gladson-Nwokah

¹Department of Marketing Faculty of Management Sciences Rivers State
University of Science and Technology, Port Harcourt, Nigeria

²Department of Marketing School of Business Rivers State Polytechnic, Bori

Abstract: The purpose of this study is to examine the current uses of database marketing, intelligence building and marketing decision-making; as well as identifying the future uses of database marketing in marketing decision-making. The paper adopted a descriptive research approach in describing the current uses of database marketing and its associated uses in marketing decision-making. The research reported in this paper utilised secondary data - thus, the paper adopted a literature review method and syntheses of the literatures formed the basis of the argument presented herein. The study finds that there are two broad sources of database marketing-internal and external sources and companies utilise these sources in building customer and competitor database marketing. Companies are currently using data from the database marketing to make decisions that in turn yields return on investment. There are two implications offered by this study, one for academics and the other for managers. For academics, this paper adds to the body of literatures in this topical area. Further researches are required to empirically test across national and international boundaries, the use of database marketing for marketing decision-making using the prepositions proposed in this paper. Study research instrument developed in this paper in a five point likert scale and attached herein, requires further researchers to test the instrument for content and construct validities, as well as testing for reliability using Cronbach alpha coefficient with a minimum threshold of 0.7. For managers, this paper has predicted future uses of database marketing, which will no doubt refine managers' thinking towards future uses of database marketing for marketing decision-making. Database marketing discussed in this study requires that for effective decision-making, organisations have to grow and nurture customers and competitors' data, build marketing intelligence and consistently monitor these data for return on investment. The paper notes that the future of database marketing will become more exciting, as companies cultivate and develop special units saddled with the responsibilities of keeping and maintaining database marketing.

Keywords: Competitors, customers, database, decision-making, intelligence, marketing

INTRODUCTION

Marketing is a dynamic field of study that has evolved and responded to the changes in external business environment. In the pre-industrial era, marketing efforts predominantly focused on the production and distribution of quantity and quality products without focusing on customers' satisfaction and long-term values. As competition intensified, organizations began to realise the need to seek and satisfy customers' needs and wants; and to build lifetime value to the customers at organizations profit. Many companies today are aggregation of many business units spanning many product lines, so they need to leverage their customers base to maximise cross-sell opportunities and manage customers across divisions. "In recent times, contemporary marketing thoughts have emerged that have changed the *modus operandi* of marketing" (Nwokah and Ezirim, 2010, p.94). One of

these contemporary thoughts is Database Marketing (DBM), which draws significantly from marketing research and information systems, marketing intelligence, brand development and management and Customer Relationship Management (CRM) with a shift from the traditional "transactional" marketing to a more relationship focused marketing.

Biegel (2007) forecasts that in 2010, marketing data that used to live in the marketing silo, will be increasingly used, in building business intelligence and drive consolidation in the technology area. The overall aim of database marketing is to move away from product-based marketing to a more customer-focused marketing. In this regard, Kelly (2000) sees database marketing as essential in understanding customer behaviour and responsiveness, which allows marketing managers understand customer lifecycle, customer loyalty, customer risk, customer profitability and customer segmentation. Customer

Corresponding Author: N. Gladson Nwokah, Department of Marketing Faculty of Management Sciences Rivers State University of Science and Technology, Port Harcourt, Nigeria

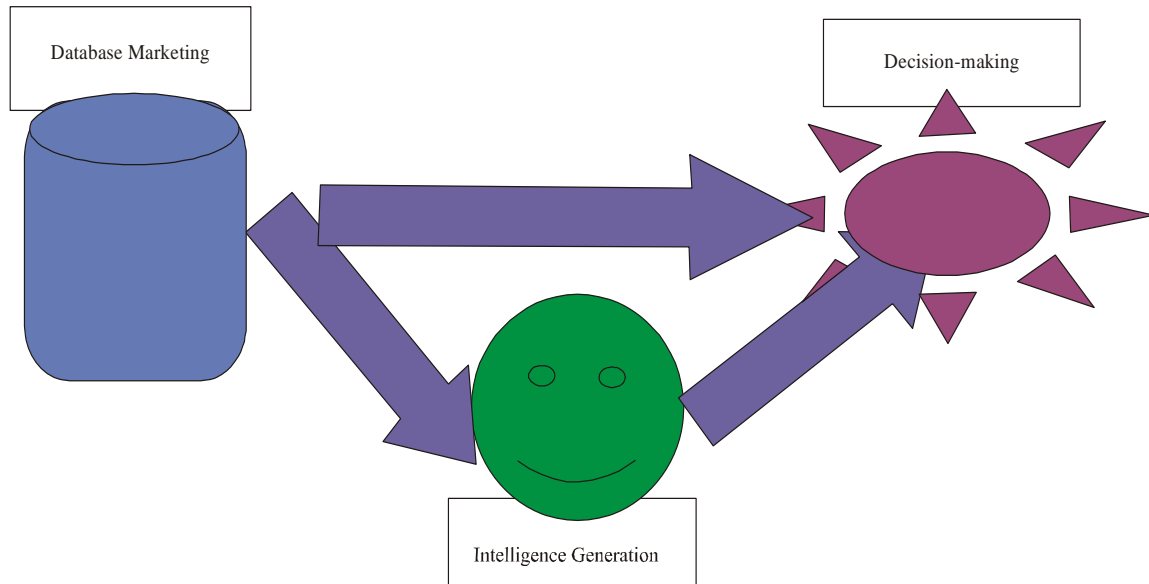


Fig. 1: Database marketing, intelligence, generation and marketing decision-making

lifecycle value is defined as the present value of future profits of a customer over his or her life of the relationship with a firm/brand (Zhang *et al.*, 2010). The knowledge of this information builds the marketing manager's marketing intelligence (Bothos *et al.*, 2009) that in turn propels him/her to make positive marketing decisions directed towards achieving the organisation's short and long-term marketing objectives. There have been studies on database marketing relating to other topical areas such as organisational learning (De-Tienne and Thompson, 1996), analytical CRM: the fusion of data and intelligence (Kelly, 2000), Data quality is everyone's business (Breur, 2009) and many others. At present, it appears that none of these studies has focused on how database marketing can enhance a marketing manager's future marketing decisions making. This present paper seeks to close the gap created because of the absence of research on how database marketing can enhance intelligence development and influence the marketing managers' decision-making.

This study shall therefore examine the concept of database marketing as it applies to marketing intelligence building and marketing decision-making. In achieving this, the paper shall focus on addressing the following research questions-what are the sources of database development? How do organisations build database marketing? How do organisations consider data mining? What relevant are database marketing to intelligence generation? How does marketing intelligence enhance marketing decision-making? What decisions are made from database marketing? What are the future implications of database marketing? The conceptual

framework shown in figure 1 shall guide this paper. In subsequent sections of this paper, the concept of database marketing, intelligence generation and decision-making with review of relevant literatures are explored. The paper then presents the current uses of database marketing and anticipates its' future uses in a contemporary business environment. Finally, the paper presents implications for marketing managers and for academics, suggestions for further researches and a summary of the conclusions of the present study.

THEORETICAL FOUNDATIONS

The concept of database marketing: The term database marketing has been interchangeably used in the literatures with customer database, marketing database and database marketing. O'Malley *et al.* (1997) clarify this by giving the differences in the use of the terms. According to O'Malley *et al.* (1997) a customer database only contains information on existing customers, whereas a marketing database is considered broader-holding information on existing and potential customers and in most cases competitors' data. Information from markets has assumed greater importance as a strategic corporate asset and an organisation cannot afford to be slow in collecting and processing this information. Evans (2008) sees marketing database as "the means for storing and retrieving individual-specific data coupled with technological facilitators leading to the targeting of such individuals based on what we know of their interests and characteristics". The basic idea behind database marketing is that it is sufficient to base tomorrow's marketing

strategies on yesterday's patterns of activities. This present paper prefers to use the term database marketing; and gives its definition later by refining De-Tienne and Thompson's (1996) definition of database marketing. A database is simply a large amount of information that is managed in a system (Parker, 2008). According to Fletcher *et al.* (1992) a database marketing "emphasizes the creation and exploitation of long-term direct relationships, something that has been identified as having significant implications for the strategic and long-term planning of the firm's marketing". In this assertion, database marketing is seen as a powerful tool that generates knowledge about consumers around an important set of dimensions and will continue to be an important component of effective marketing campaigns and strategies formulation.

Dibb and Meadows (2004) and Chaffey *et al.* (2009) observe, "Database marketing provides technological enabler, which allows vast quantities of customer-related data to be stored and accessed in ways that create strategic and tactical marketing opportunities". This definition appears to have ignored the processes and sources of data generation, but lays more emphasise on data usage within the organisation's database. Tapp (2008) had earlier defined database marketing as "a comprehensive collection of interrelated data serving multiple applications, allowing timely and accurate on-demand retrieval of relevant data and having a data management system independent of applications". This definition appears better than Chaffey's definition of database marketing on the grounds of the inclusion of the process of data acquisitions. A more comprehensive definition of database marketing appears to be one given more than a decade ago by De-Tienne and Thompson (1996) in their paper titled 'Database marketing and organisational learning theory: toward a research agenda; They defined database marketing as:

The process of systematically collecting, in electronic or optimal form, data about past, current and/or potential customers, maintaining the integrity of the data by continuing monitoring customer purchases and/or by inquiring about changing status and using the data to formulate marketing strategy and foster personalised relationships with customers.

This definition is built on the basic strength of incorporating all elements of database marketing, ranging from data collection, profiling, hygiene, data mining, legal and ethical issues in database marketing and the integrity in building mutual and beneficial relationships with the customers. Arising from this, Evans (2008) re-echoed and emphasised the tactical and strategic roles of organisations in maintaining and using database marketing as key components of the above definition.

These authors also propose, "Database marketing provides the opportunity for organisations to mechanise the process of learning about customers" and for this to be iterative because "the database transcends the status of a record-keeping device and becomes an implement of ever-increasing organisation knowledge. Harridge-March (2008) observes, "The information which an organisation stores about a customer should be fit for the purpose intended", (accurate data). Harridge-March believes that data should be up to date and error free (data hygiene) and advises that organisations should not betray trust (integrity) by allowing data to be used by others and should ensure that data are kept safe in other not to abuse privacy (ethics). This assertion interprets the need for data quality.

Breur (2009) argues that data quality means relevance, timeliness, completeness, trust and accessibility besides accuracy. These elements summarises De-Tienne and Thompson's definition of database marketing. Although, De-Tienne and Thompson appear to have given a comprehensive definition of database marketing, it still lack some basic concepts which are found in the marketing research, marketing information systems and marketing intelligence systems which are the baseline theories through which the concept of database marketing emerged. Kotler and Armstrong (2010) included consistency and appropriateness in their definition of marketing research. This is also found in Harridge-March's advice on keeping and maintaining database marketing; and in Caemmerer's (2009) study on planning and implementation of integrated marketing communications, using the case of Renault cars in Germany. In the circumstance, this paper refines De-Tienne and Thompson's (1996) definition and adopts it as the definition of database marketing to read as thus:

The process of systematically and consistently collecting, in electronic or optimal form, appropriate data about past, current and/or potential customers, maintaining the integrity of the data by continually, monitoring customer purchases and/or by inquiring about changing status and using the data to formulate marketing strategy and foster personalised relationships with customers to achieve organisations marketing objectives.

This present definition differs slightly from De-Tienne and Thompson's definition by including 'consistency and appropriateness'. The author argues that data collection must be consistent, appropriate and relevant for the purpose for which it is meant for as earlier observed by Harridge-March (2008). The justification of this paper is based on Mc-Donald's (2007) definition of database marketing as "a collection of data and information from outside and inside an organisation

which is stored in such a way that it can be accessed and analysed to provide intelligence for marketing decision making to achieve the company's objectives". Tapp (2008) classified these inside and outside information as internal and external sources in developing database marketing. This would lead to discussing the various tenets of database marketing from the relevant literatures.

Data mining: Data mining often referred to as knowledge discovery in a database is the process of extracting interesting (non-retrieval, implicit, previously unknown and potentially useful) information or patterns from data in large databases (Breur, 2009). Mc-Donald (2007) sees data mining as software that allows users to access the data warehouse to search for correlations between data that can be used in decision-making. Some times data mining is used interchangeably with web mining (Mihai, 2009) since it makes no difference whether the content was obtained from the web, a database, a file system or through any other means. There are hundreds of millions of websites on the internet. Mihai (2009) defines web mining as "the use of data mining techniques to extract useful patterns from the web". Web sites carry enormous amounts of information which if carefully analysed contain a "minefield of gold". When persons visit organisations' website, they provide information about themselves. This information also includes how they respond to the content of the site; for example, which links visitors click, where they spend most of their time, which search terms they use and when they browse (Loiacono and Mc-Coy, 2004). Other sources of information include filled-out forms, articles, job descriptions and curriculum vitae and features of competitive products (Breur, 2009). All this information are stored in the database, thus, there is a lot of information in companies' website visitors and content, which probably companies are not making the best use of Kamarulzaman (2007). However, businesses, which want to be on the cutting-edge, must rely and use web information stored in the data warehouse, which provides database systems.

Recent studies have classified nine ways data-mining techniques can be used to predict consumer behaviour, marketing analytics and measurement (Marketing Profs, April 27 2010). These include regression analysis, choice modelling, rule induction, network/link analysis, clustering/ensembles, neural networks, memory based reasoning/case based reasoning, decision trees, uplifting modelling (net response), modelling or incremental response modelling. A data warehouse is similar to an executive information system that stores all external and internal information in a format that can be easily retrieved (Mc-Donald, 2007). Marketers and business analysts use data-mining techniques to solve problems of this nature. These are "machine-learning algorithms that

find hidden patterns in databases and report or act on them" Schoenbachler *et al.* (1997). There are many web-mining techniques, which rely on data mining and it is rather difficult for one person to understand the entire field. Some of these techniques are discussed next.

Sources of database marketing: To be a true business machine, a website has to act as the bridge between the customer and the company's process (Lopuck, 2006). The great advantage of web marketing is that visitor interactions can be more effectively measured than in brick-and-mortar stores or direct mails. Therefore, the basic concepts should be considered and applied thoroughly (Turban *et al.*, 2008). To use data mining on the website, companies have to establish and record visitor characteristics and visitor interactions. Tapp (2008) classifies this as external source of data generation. These are data collected outside the organisation and include such data as Geodemographics (geographic and demographics). This contains information such as region, size of city, country, population density, climate, language, age, occupation, gender, education, family size, religion, race, income and nationality (O'Malley *et al.*, 1997; Turban *et al.*, 2008). Cognitive, affective, behavioural are data that allow marketers garner a clear understanding of what customers, prospects look like (cognitive) and how they act (behavioural). Information sought in this approach include, attitudes, benefits sought, loyalty status, readiness stage, usage rate, perceived risk, user status, innovativeness (Kahan, 1998; Turban *et al.*, 2008).

Psychographic (Lifestyle): Data have advantage over geodemographic data according to Turban *et al.* (2008). This is because, psychographic data are regularly updated and information in this database contains customers' social class, lifestyle, personality and activities. Tapp (2008) also argues that internal data is one of the sources of data generation in database marketing. O'Malley *et al.* (1997) believe that internal data may be considered as "Live" data, which they refer to as the actual shopping behaviour of the customers. Turban add that obtaining these data is usually in a very interactive manner, which allows personal contacts with the customers. They further argue that it provides marketing organisations with a greater ability to understand the customer, the market and competition. According to O'Malley *et al.* (1997) data can be gleaned from a number of internal sources including in-house research, warranty cards and from the retailers' own database which are derived, increasingly, from loyalty schemes.

Various sources through which internal data can be generated from according to Turbal include purchase history, preference information, click, link opportunities. Purchase history is a list of products purchased by target

customer and the respective dates of purchase. Advertising history indicates the items that have been advertised or shown to prospects and possibly indicating prospects who have tendencies of becoming customers. Preference information refers to item ranking provided by a visitor. Click-stream information is a history of hyperlinks that a visitor has clicked on. Linked opportunities are hyperlinks that have been presented to a visitor (Lopuck, 2006; Parker, 2008). Visitor – company interactions shows the total number of customer referrals from a visitor, total profit, total page viewed, number of visitors per month and brand measurement (Chaffey, 2009). Brand measurement for example, can be lists of positive or negative concepts a visitor associates with the brand, which can be measured by surveying visitors periodically.

Before a company decides on Data mining, data would have been gathered in the company's data warehouse. Kotler and Armstrong (2010) argue that data warehouse is a companywide electronic database of finely detailed customer information that needs to be sifted through for germs. Breur (2009) argues that the essence of data warehouse is not just to collect data, but also to pull it together into a central, accessible location. Data mining techniques are used by CRM to unearth the riches hidden in customer databases. The hidden customers' data most often lead to marketing opportunities to personalised products to specific target market as discussed latter in this paper. The marketing opportunities from the database marketing facilitate the building of the marketing managers marketing intelligence. In the next section, the use of database marketing for marketing intelligence generation is discussed.

Database marketing and intelligence building:

Database marketing involves developing a list that can help marketing managers generate specific messages for certain customers, or sending a message to a subset of customers based on characteristics that they share with people who tend to buy from them Caley (2010). Database marketing helps marketing managers develop such intelligence that help them track responses, measure effectiveness, improve customer services, personalise offers, diversify products and services, customer nurture and customer relationship management. Rhee and McIntyre (2009) observe that a major advantage of database marketing without intermediaries is that the firm can collect fine detail about and how many products the end user has purchased, how much in monetary value the customer has spent and how many days it has taken from receipt of the marketing contacts until purchase. This is in line with RFM (Recency, Frequency and Monetary value) concept developed by Sears Roebuck & co (Kahan, 1998). Pinto *et al.* (2009) argue that technology has provided marketers with huge amounts of data and

artificial intelligence researchers with high level of processing rate machines. Kotler and Armstrong (2010) see marketing intelligence as a systematic collection and analysis of publicly available information about consumers, competitors and developments in the market place. They observe that the aim of marketing intelligence is to improve strategic decision-making. However, not all information in a database is publicly available.

Lymperopoulos and Chaniotakis (2005) observe that the internet is information-rich resource and useful inter-organisational communication tool that is able to transform the way in which firms gather, produce and transmit market intelligence. However, database-marketing assists marketing managers develop external information to complement with the internal data that could advance marketing decision-making. Kaur *et al.* (2009) argue that market intelligence is the starting point of market orientation and is more broader concept than just finding out about customers.

Database marketing does not only help organisations to acquire information about the customers, but it also contributes in building marketing managers' knowledge about competitors. Nwokah and Maclayton (2006) Nwokah (2006, 2008a, 2009) argue that a focus on competitive knowledge of firms will increase organisations profitability, market share and sales growth. Competitive intelligence in most cases is, referred to as competitors' intelligence. Wright *et al.* (2002: 350) have distinguished competitor intelligence from competitive intelligence. According to them, competitor intelligence is, defined as those activities by which a company determines and understands its competitors, determines and understands their strength and weaknesses and anticipates their moves. They believe that the underpinning words are - identified, determined, understand and anticipate industry and competitors but this according to them only defines competitor intelligence. Competitive intelligence on the other hand extends the role to include consideration of competitor responses to consumer/customer needs and perceptions and one's own responses in the strategic decision-making process. The implication of this is that competitive intelligence is wider in scope than the competitor intelligence. The focus of competitor intelligence tends to be on problems associated with the daily profitable marketing of a company's products or services. The scope of competitive intelligence is a value-added concept that associates competitor intelligence and strategic planning. Porter (2004), argues that:

Intelligence data on competitors can come from many sources: reports filed publicly, speeches by a competitor's management to security analysts, the business press, the sales force, a firm's customers, or suppliers that are common to competitors, inspection

of a competitor's products, estimates by the firm's engineering staff, knowledge gleaned from managers or other personnel who have left the competitor's employment

Nwokah (2008b) adds that for organisations in a corporate governance to develop a sustainable competitive advantage, senior marketing personnel should therefore pay attention to the areas of corporate intelligence and transformational marketing. Some times competitive intelligence may not be generated through any of the above suggested by Porter (2004), but through competitive scanning. Competitive intelligence scanning defines a major avenue of indentifying, gathering and sharing needed information across organizations with the aim of achieving higher value and long time profit. The basic aim of competitive intelligence scanning is to evaluate and to compare the performance of different companies within the same competitive environment (Decker *et al.*, 2005).

Competitive intelligence focuses on monitoring the competitive environment with the aim of providing actionable intelligence that will provide a competitive edge to the organization. Competitive intelligence is a very important tool of an organization strategic planning and management process. The formal exploration process of the marketing strategy paradigm has been linked with the environmental scanning interaction as a basis for gathering and processing the information and the information processing theory paradigm (Wong *et al.*, 2005). Competitive intelligence on the other hand, pulls together data and information from a very large and strategic view, allowing a company to predict or forecast what is going to happen in its competitive environment (Decker *et al.*, 2005). It allows company to pro-actively rather than reactivity anticipates market development and remains competitive by improving its strategic decisions, which leads to good marketing effectiveness. Fahey (2007) argued that the basis of outmanoeuvring and outperforming the competitors is to detect, anticipate and understand the competitive environment. As early as 1979 Porter argued that competitors, competitive environment contains the underlying economics and so-called competitive forces, which are threat of new entrants, bargaining power of suppliers, bargaining power of customers and threat of substitute products (Porter, 2004). Information gathering should not be activities of only the senior managers, but there should be an integrated approach, in gathering information, that will enhance development in an organization (Amaravadi *et al.*, 1995; Tan and Ahmed, 1999).

Scanning for competitive intelligence is a major vehicle for organizations to obtain needed information for marketing intelligence generation (Yu and Cai, 2007;

Logman, 2008) and market adaptation (Hughes, 2008). Lee and Trim (2006) believe that organizations competitive advantage rests on the ability of the organizations to scan proactively for competitive intelligence and make effective response. Customers' needs can be met more effectively with the assistance of information technology. Trim (2004) identified competitive strategy and organizational performance as strategic consequences for managerial scanning behaviour. Porter (2004) observed that compiling data for a sophisticated analysis probably requires more than just hard and advises that an organisation can be effective if there is a sort of an organised mechanism - some sorts of competitor intelligence system – to insure that the process is efficient.

From the foregoing, discuss, it is possible to argue that database marketing will essentially become the ideal tool for intelligence building in terms of both customer –focus and competitive-focus. It has been argued that marketing is a unique and the most distinguished function of every business and as such any business in which marketing is absent or incidental is not a business and should not be run as one (Nwokah and French, 2010). This assertion is made possible through the knowledge of who the customers are, what they want, how they want, where they want and the knowledge about competition, which are provided in organisations' database marketing. Based on these, the author proposes thus:

- P1 Appropriate customer information on organisations' Database marketing significantly refines marketing managers' marketing intelligence about the customers.
- P2 Competitors' data built on organisations' database marketing builds marketing managers' competitive intelligence.

The next section discusses database marketing and marketing decision-making.

Database marketing and marketing decision-making:

Marketing is field with decision-making in the face of risk and uncertainty, which varies from one organisation to the other. Marketing decisions are not usually, made by intuition, whether it is a business-to-consumers or business-to-business organisation. Marketing decisions are made through accurate and reliable data. The essence of database marketing is to develop marketing intelligence that enable marketing managers make marketing decisions in a turbulent, dynamic and contemporary business environment (Mc-Donald, 2007). Peter Drucker observed that decisions are not only supposed to be a way to providing solutions to problems, but should also, be focused on finding the right question (Belbin, 2007). He identified five distinct phases of decision-making to

include defining the problem; analysing the problem; developing alternative solutions; deciding upon the best solution; converting the decision into effective actions (Belbin, 2007). Some times when faced with uncertainty, marketing managers may opt to remain silent without a decision because of lack of information in the database marketing. However, they refused to realise that by keeping silent, they have made decision by deciding not to decide and allowing the status quo to remain rather than change. In the context of database marketing, marketing managers need to worry about what decisions should be made and how they should be made to achieve the organisation's long-term objectives.

A recent study by Unica in partnership with Saloway & co (2010) reveals that one of the challenges facing marketers is how to turn data into actions. The study reveals that many marketers are using both online and offline when making decisions about marketing offers. Customers' initiated interaction built around database marketing provides excellent opportunity to personalise marketing communications. The Unica study shows that customers who engage with the company's brand, share their wants and needs are more receptive to organisation's marketing offers. Marketing managers can use the database through the intelligence built from the customer interactivities' according to lifetime value of; and identify the top strata of customers who account for over half the profits. These sets of customers are targeted for commercial action and tracked through reporting (Micheaux and Gayet, 2001). Database marketing enables companies to design offers more exactly to tailor to the customers' wants, needs and build long-term relationship with valued customers while prospecting and attracting new customers. The information in the database marketing is used in predicting more accurately the offers success, better manage the transaction's economics from design to execution and tracking; and measure return on investment (Wee, 2001; Trim, 2002). It promotes testing new combination of existing products features for segments of customers that a company already serves.

The Unica (2010) study shows that for years, marketers have been using demographics and transactional data to segment customers and improve campaign results. They observe that website data represents a tremendous opportunity to complement this with information about customer interests, intent and behaviour. Their study found that 75% of companies surveyed use this data when making decisions about marketing offers. This gives credence in the integration of online and offline data in marketing decision-making. Larson and Ecler (2007) identified four specific kinds of insight typically important in extending database marketing to become a fully strategic approach in marketing decision making. These components are: a meaningful and pragmatic segmentation, that is,

information that is relevant to the company's products or services and that the company is capable of acting on. Information about why consumers behave the way they do – that is, intelligence that equips the company to influence their decisions as they relate to its products. Systematic mechanisms to inject these strategic consumer insights, into core marketing activities in ways that align with the drivers of, corporate profitability; and finally, alignment between these consumer insights and the entire organisation (Larson and Ecler, 2007). However, several decisions are made from database marketing, which perhaps may require a full separate study. Based on the foregoing discuss, the author proposes

- P3 Marketing intelligence built from database marketing will significantly influence marketing managers' marketing decision-making.

Present uses of database marketing: A puzzle around the business climate, particularly in the developed nations such as United Kingdom and United States of America, will show the current uses of database marketing in both the business-to-business and business-to-consumers as well as non-profit making organizations. This is not surprising because the use of database marketing started with God Himself using information from His database to make decision on the creatures in the Universe. In Genesis 1 verse 2, God's spirit moved over the surface of the Universe on identifying the void and empty earth. Basically, God was troubled by this, thus the spirit moved to conduct marketing research that developed the database which built His intelligence to decide on what, when and how to create. Creations began after the return of the Spirit of God to Him haven conducted marketing research and building intelligence data for decision create. No wonder He was satisfied in every thing He created (Nwokah and Ondukwu, 2009).

In the retail sector, database marketing is used to track customers' behaviour and motivations and in appraising customers' loyalties. However, many retail shops in the UK have different instruments of keeping customers data for loyalty rewards. For instance, Tesco, Iceland, Corporative society have customer loyalty cards which are used to determine the regularity and frequency the customers patronise the shops and decide on a corresponding rewards which could be in form of cash or quantity discounts. The Blackwell reward card is another instrument that contains the extent of loyalty of purchase of books from Blackwell bookshop, which accrues cash discount for any product purchased. In the airline industry, database marketing is effectively used. For instance, the British Airways (BA) keeps the data of all their customers in terms of date of travel and as well as frequency of travel and use these data to admit frequent travellers into different categories of the BA's executive

club membership. The Lufthansa airline has recently launched the “Miles and More”, a database cards that aims at giving free flight ticket rewards to fliers for flying for five consecutive times. In the education sector (University education), database marketing is used to make decision on how to target international students and to respond to the British law of equal opportunities. Programmes director could decide on which countries to participate in education trade fair to campaign for admission of new international students and receive adequate return on investment. In the corporate governance as Nwukah (2008b) observes, database marketing is essential in building leaders corporate intelligence and transformational managerial leadership competence. Leaders use information from the database to allocate and distribute equitably the natural resources. In politics, politicians use information from the database marketing to make campaign decisions and target voters. From the avalanches of the uses and usefulness of database marketing, it becomes imperative to believe that the future uses of database are very promising. Based on the foregoing discuss, the author proposes thus:

- P4 Database marketing will in the future become the *defacto* basis for all aspects marketing decision-making in both the B2C and B2B organizations

The next section, predicts the future uses of database marketing in a contemporary business environment.

Future uses of database marketing: It is hardly deniable that the future of database marketing in a contemporary business environment from the evidence discussed earlier is bright in both the B2C and B2B firms as marketing decisions will heavily depend on information from the database marketing. One area this paper predicts database marketing will be used is in making decision of product differentiation and price discrimination. In the future, database marketing will continue to be used in segmenting the market in terms of demographics and geodemographic variables. Therefore, products/prices to geodemographics with less income will differ from that of geodemographics with high income. In 1995, Coca-cola Nigeria for instance, briefly used this. Prices of coca-cola products in the Nigerian Universities campuses were different from the prices sold outside the universities campuses. Database marketing will be used to track creative campaigns that deliver. Marketers can handpick and distill the most useful information about new and established social networks; users generated content, blogging, wikis, media and more. As technology, competition, customer value proliferate, the future of database marketing will become more exciting. In the future database marketing will continue to play its strategic roles in helping marketers to customize their

products and enable them to receive almost online feedback about any product promotion or change in channel effectiveness. Across the Universe, particularly in the developed economies, database may be the only basis of making effective decisions about customers and ‘may be’, about the competitors. Database marketing will be strategically used in determining what products to make available to consumers and will be very effective determinant of integrated interactive marketing campaigns. Decision will not be made in error since most marketing decisions will be based on intelligence garnered from the database. It is on this note; we recommend that organisation should continue investing on building and developing database marketing. Constant monitoring of data in the database marketing could be very helpful to marketers to develop customer and competitive intelligence that could enable them develop products and services that could give lifetime values to consumers and increase the consumers’ loyalties. The need for a separate unite to take charge of database marketing will not only help organisations in terms of data acquisition, but will also assist companies in keeping and monitoring using data to generate return on investment.

CONCLUSION

The general system elements for any database marketing include a data acquisition system, database management system, model base, directories and retrieval systems. The database marketing intelligence enable marketing managers make such decisions in terms of market segmentation and targeting. Modern database marketing would not be possible without a computer because of the masses of data to handle. Database marketing is of particular importance to marketers, whether the applications take a variety of forms and are commonly used in marketing operation, including both analysis and planning, implementation and control. Database marketing could also be described as interacting, continuing future-oriented structure of people, equipment and procedure designed to generate and process information flow to aid managerial decision-making in company’s marketing programme.

A critical area of database marketing that permits decision-making is its possibility of dividing the market into manageable segments and the process of establishing the group of appropriate consumers to whom the relevant company’s offerings will be directed is referred to as targeting. The desired manner in which these offerings are to be perceived by the target consumers, relative to directly and indirectly competing offerings is what positioning is out to specify and establish. Knowledge of

the criteria for segmenting the market and for targeting

Appendix: Proposed research questionnaire

S/No.	Questionnaire items	SDA	DA	N	A	SA
	Database Marketing					
1.	Database marketing enable us to target our marketing efforts at customers who have the highest probabilities of purchase					
2.	In our company, database marketing is considered very important aspect of our customer relationship management					
3.	We are always interested in obtaining information about our customers to build our database marketing					
4.	We regularly monitor and update information in our database marketing for data hygiene					
5.	From our database marketing, we understand the most important factors driving our customers choices					
6.	Based on the information in our database marketing, we understand our customer likelihood to purchase					
7.	Database marketing enable us understand our customers behavioural response in terms of past purchase behaviour for similar products, attitudes or psychographics					
8.	We profile customers in terms of geographics, demographics and others using data from our database marketing					
9.	We use data mining to discover interesting relationships between variables in our large database marketing					
10.	Data mining techniques enable us discover regularities between our products so as to forecast sales, promotional pricing, or product placement					
	B Intelligence Generation					
11.	In our company, we have a good marketing intelligence team					
12.	Our marketing intelligence team are very sensitive to detect useful data from our database marketing					
13.	We maintain a separate unit/department for marketing intelligence					
14.	Information from our database marketing help in building the general marketing intelligence of our marketing team					
15.	Data from our customer database also assist in building our competitive intelligence					
16.	Competitive intelligence is as important as our customer intelligence and we take both seriously					
	C Marketing Decision Making					
17.	We rely heavily on information from our database marketing for all our marketing decision-making					
18.	Marketing decisions made previously based on our database marketing resulted to positive return on investment					
19.	We evaluate the quality of data in our database marketing through the outcome from decisions made thereof.					
20.	We use data from our database marketing to make proactive marketing decisions					

‘would be consumers of company’s products’ are keys to successful marketing and brand management. It is therefore necessary that professional skills be sharpened in these areas, if company resources are not to be wasted and if the desire to stay ahead of competition is to be realised on a consistent basis. In managing the ‘segmentation initiative’, it is important to ensure that segments in which the company chooses to compete in are definitive enough to facilitate: easy profiling of the consumer group and competitor(s), easy knowledge about the key driver(s) of demand and value creation, easy determination of the basis for the decision to compete within the segment.

Implications: For academics, this paper adds to the growing body of literatures in this topical area. Further researches are required to empirically test across national and international boundaries, the use of database

marketing for marketing decision-making using the prepositions proposed in this paper. This paper has also developed a twenty item questionnaire in a five point likert scale (Appendix) ranging from strongly disagree to strongly agree, which requires further researchers to test this instrument for content and construct validities, as well as testing for reliability of the items using Cronbach alpha coefficient, with a minimum threshold of 0.7 (Nunnally, 1978). For managers, this paper has predicted future uses of database marketing, which will no doubt refines marketing managers’ thinking towards future uses of database marketing for marketing decision-making.

REFERENCES

- Amaravadi, C.S., S. Samaddar and S. Dutta, 1995. Intelligent marketing information systems: computerised intelligence for marketing decision

- making', *Market. Intell. Planning*, 13(2): 4-13.
- Belbin, M., 2007. *The Practice of Management: The Classic Drucker Collection*, Elsevier, England.
- Biegel, B.A., 2007. The megatrends: what to expect in direct and interactive marketing in 2010. *J. Direct Data Digital Market. Practice*, 9(2): 122-133.
- Bothos, E., D. Apostolou and G. Mentzas, 2009. Collective intelligence for idea management with internet-based information aggregation markets. *Internet Res.*, 19(1): 26-41.
- Breur, T., 2009. Data quality is everyone's business-designing quality into your data warehouse-part 1. *J. Direct Data Digital Market. Practice*, 11(1): 20-29.
- Caemmerer, B., 2009. The planning and implementation of integrated marketing communications. *Market. Intell. Planning*, 27(4): 524-538.
- Caley, N., 2010. Database Marketing for the Small Business Operator: Use Simple Database Techniques to Improve Direct Marketing Performance Online. Retrieved from: <http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=4&hid=6&sid=dc36ae6e-b0f6-47de-bf0c-e4a91f6773ef%40sessionmgr4> (Accessed on: 30th March 2010).
- Chaffey, D., 2009. *E-Business and E-Commerce Management: Strategy, Implementation and Practice*, 4th Edn., Pearson Prentice Hall, London, England.
- Chaffey, D., F. Ellis-Chadwick, R. Mayer and K. Johnstone, 2009. *Internet Marketing: Strategy, Implementation and Planning*. 4th Edn., Pearson Prentice Hall, England.
- Decker, R., R. Wagner and S.W. Scholz, 2005. An internet-based approach to environmental scanning in marketing planning. *Market. Intell. Planning*, 23(2): 189-199.
- De-Tienne, K.B. and J.A. Thompson, 1996. Database marketing and organisational learning Theory: Toward a research agenda. *J. Consumer Market.*, 13(5): 12-34.
- Dibb, S. and M. Meadows, 2004. Relationship marketing and CRM: A financial services case study. *J. Strategic Market.*, 12(2): 111-125.
- Evans, M., 2008. From 1086 and 1984: Direct marketing into the millennium. *Market. Intell. Planning*, 16(1): 56-67.
- Fahey, L., 2007. Connecting strategy and competitive intelligence: Refocusing intelligence to produce critical strategy inputs. *Strategy Leadership*, 35(1): 4-12.
- Fletcher, K., C. Wheeler and J. Wright, 1992. Success in database marketing: Some crucial factors. *Market. Intell. Planning*, 10(6): 18-23.
- Harridge-March, S., 2008. Direct marketing and relationships: opinion Piece, direct marketing. *Int. J.*, 2(6): 192-198.
- Hughes, T., 2008. Knowledge exchange and the opportunities for marketing intelligence and planning. *Market. Intell. Planning*, 26(5): 435-440.
- Kahan, R., 1998. Using database marketing techniques to enhance your one-to-one marketing initiatives. *J. Consumer Market.*, 15(5): 491-493.
- Kamarulzaman, Y., 2007. Adoption of travel e-shopping in the UK. *Int. J. Retail Distrib. Manage.*, 35(9): 703-719.
- Kaur, G., R.D. Sharma and N. Seli, 2009. Internet market orientation in Indian banking: An empirical analysis. *Managing Serv. Qual.*, 19(5): 595-627.
- Kelley, S., 2000. Analytical CRM: The fusion of data and intelligence. *Interactive Market.*, 1(3): 262-267.
- Kotler, P. and G. Armstrong, 2010. *Principles of Marketing*. 13th Edn., Pearson Prentice Hall, USA.
- Larson, M. and T. Ecler, 2007. Increase your Company's Return on Investment from Database Marketing. *Hand Book Business, Strategy*.
- Lee, Y. and P.R.J. Trim, 2006. Retail marketing strategy: the role of marketing intelligence, relationship marketing and trust. *Market. Intell. Planning*, 24(7): 730-745.
- Logman, M., 2008. Contextual intelligence and flexibility: Understanding today's marketing environment. *Market. Intell. Planning*, 26(5): 508-520.
- Loiacono, E. and S. Mc-Coy, 2004. Web site accessibility: An online sector analysis. *Inform. Technol. People*, 17(1): 87-101.
- Lopuck, L., 2006. *Web Design for Dummies*. 2nd Edn., Wiley Publishing, Canada.
- Lymperopoulos, C. and L.E. Chaniotakis, 2005. Factors affecting acceptance of the internet as marketing-intelligence tool among employees of Greek Bank branches. *Int. J. Bank Market.*, 23(6): 484-505.
- Marketing Profs, 2010. The nine most common Data mining techniques used in predictive analytics. [online] Retrieved from: <http://www.marketingprofs.com/articles/2010/3567/the-nine-most-common-data-mining-techniques-used-in-predictive-analytics/?adref=znnpbsc44410> (Accessed on: April 28, 2010).
- Mc-Donald, M., 2007. *Marketing Planning: How to Prepare them, How to use them*. 4th Edn., Elsevier, England.
- Micheaux, A. and A. Gayet, 2001. Turning a marketing database into relationship marketing database. *Int. Market.*, 2(4): 327-346.
- Mihai, I., 2009. Web content mining. [online] Retrieved from: <http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=3&hid=104&sid=d0ec376e-b8e8-428e-b8cc-62db3f48f9e0%40sessionmgr13> (Accessed on: 27 April 2010).
- Nunnally, J., 1978. *Psychometric Theory*. McGraw-Hill, New York.
- Nwokah, N.G., 2006. Synthesised model of market orientation-business performance relationship. *Acta Commerci.*, 6: 50-62.
- Nwokah, N.G. and D.W. Maclayton, 2006. Customer focus and business performance the study of food and

- beverages organizations in Nigeria. *Measuring Bus. Excell.*, 10(4): 65-76.
- Nwokah, N.G., 2008a. Marketing in Governance: Leader-managerial practices for efficiency in competency-based administration and transformational marketing model, *Corporate Governance. Int. J. Bus. Soc.*, 8(1): 18-27.
- Nwokah, N.G., 2008b. Strategic market orientation and business performance: The study of food and beverages organisations in Nigeria. *Euro. J. Market.*, 42 (3-4): 279-286.
- Nwokah, N.G., 2009. Customer-focus: competitor-focus and marketing performance. *Meas. Bus. Excell.*, 13(3): 20-28.
- Nwokah, N.G. and F.E. Ondukwu, 2009. Competitive intelligence and marketing effectiveness in corporate organizations in Nigeria. *Afr. J. Market. Manage.*, 1(1): 010-022.
- Nwokah, N.G. and A.C. Ezirim, 2010. Total quality marketing and impression management for effective insurance marketing. *Int. Res. J. Finance Eco.*, 38: 94-103.
- Nwokah, N.G. and A. French, 2010. History development and practice of ECRM. *Proceeding of Academy of Marketing Conference, Coventry Univeristy* (In Press).
- O'Malley, L., M. Patterson and M. Evans, 1997. Retailer use of geodemographic and other data sources: An empirical investigation. *Int. J. Retail Dist. Manage.*, 25(6): 188-196.
- Parker, N.T., 2008. *Internet Marketing: How to Get a Website that Works for your Business-Promoting your Business Online and Maximise Your Sales*, Right way, London.
- Pinto, F.M., A. Marques and M.F. Santos, 2009. Ontology-supported database marketing. *Database Market. Customer Strategy Manage.*, 16(2): 79-91.
- Porter, M., 2004. *Competitive Strategy: Techniques of Analysing Industries and Competitors*. free Press Export, New York.
- Rhee, E. and S. McIntyre, 2009. How current targeting can hinder targeting in the future and to do about it. *Database Market. Customer Strategy Manage.*, 16(1): 15-28.
- Schoenbachler, D.D., G.L. Gordon, D. Foley, L. Spellman, 1997. Understanding consumer database marketing. *J. Consumer Market.*, 14(1): 5-19.
- Tan, T.T.W. and Z.U. Ahmed, 1999. Managing marketing intelligence: An Asian marketing research perspective. *Market. Intell. Planning*, 17(6): 298-306.
- Tapp, A., 2008. *Principles of Direct and Database Marketing: A Digital Orientation*. 4th Edn., Pearson Prentice Hall, England.
- Trim, P.R.J., 2002. Corporate intelligence and transformational marketing in the age of the internet. *Market. Intell. Planning*, 20(5): 259-268.
- Trim, P.R.J., 2004. The strategic corporate intelligence and transformational marketing model. *Market. Intell. Planning*, 22(2): 240-256.
- Turban, E., D. King, J. McKay, P. Marshall, J. Lee D. Vichland, L. Volnino, C. Cheung and L. Lai, 2008. *Electronic Commerce: A Managerial Perspective*. 4th Edn., Pearson Prentice Hall, London, England.
- Unica, 2010. The State of Marketing 2010 Unica's Survey of Marketers. [Online] Retrieved from: <http://www.unica.com/documents/us/unicaglobalmarketing/survey2010.pdf> (Accessed on: 31st March, 2010).
- Wee, T.T.T., 2001. The use of marketing research and intelligence in strategic planning: Key issues and future trends. *Market. Intell. Planning*, 19(4): 245-253.
- Wong, Y.H., Y.K. Chan and T.K.P. Leung, 2005. Managing information diffusion in internet marketing. *Euro. J. Market.*, 39(7/8): 926-946.
- Wright, S., D. Pickton and J. Calof, 2002. Competitive Intelligence in UK Firms: A typology. *Market. Intell. and Planning*, 20(6): 349-360.
- Yu, Y. and S. Cai, 2007. A new approach to customer targeting under conditions of information shortage. *Market. Intell. Planning*, 25(4): 343-359.
- Zhang, J.Q., A. Dixit and R. Friedmann, 2010. Customer loyalty and lifetime value: An empirical investigation of consumer packaged goods. *J. Market. Theory Practice*, 18(2): 127-139.